

AMENDMENTS TO THE CLAIMS

Please amend the specification as follows:

Paragraph beginning on page 7, line 19:

An electroluminescent display apparatus according to one aspect of the present invention includes a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, and a scan line driving circuit. Each of the display cells includes a select transistor whose gate receives a select voltage from one of the scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor. The scan line driving circuit supplies a stepped pulse as the select voltage to each of the scan lines, the stepped pulse being formed of a first voltage and a second voltage larger than the first voltage. ~~A~~The other of the source and the drain of the drive transistor and other terminal of the capacitor are connected to a scan line next to the one of the scan lines.

Paragraph beginning on page 8, line 9:

An electroluminescent display apparatus according to another aspect of the present invention includes a plurality of display cells arranged in a matrix form in which a plurality of select scan lines and a plurality of data lines intersect, a plurality of write scan lines, and a scan line driving circuit. Each of the display cells includes a select transistor whose gate receives a select voltage from one of the select scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor. Each of the write scan lines is arranged in a pair with each of the select scan lines and is connected to ~~a~~ the other of the source and the drain of the drive transistor and other terminal of the capacitor. The scan line driving circuit supplies a scan line select voltage to each of the select scan lines, and supplies a write reference voltage to each of the write scan lines that is in a pair with the each of the select scan lines. The scan line driving circuit supplies the scan line select voltage and the write reference voltage at a voltage value and a timing such that a first phase, a second phase, and a third phase are sequentially repeated, the first phase indicates that the data voltage is written in the capacitor without allowing the electroluminescent element to emit light, the second phase indicates that a voltage stored in the

capacitor is held without allowing the electroluminescent element to emit light, and the third phase indicates that light emission by the electroluminescent element is sustained until the next first phase depending on the voltage stored.

Paragraph beginning on page 9, line 10:

An electroluminescent display apparatus according to still another aspect of the present invention includes a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, a plurality of common lines, and a data line driving circuit. Each of the display cells includes a select transistor whose gate receives a select voltage from one of the scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor. Each of the common lines is connected to a the other of the source and the drain of the drive transistor and other terminal of the capacitor. The data line driving circuit calculates a voltage drop in the electroluminescent element at a position in a direction of each of the scan lines, based on the position in the direction with respect to the each of common lines and a wiring resistance between the display cells arranged on the each of

common lines, and supplies a data voltage corrected based on the voltage drop to each of data lines.

Paragraph beginning on page 10, line 2:

A driving method according to still another aspect of the present invention includes driving an electroluminescent display apparatus. The electroluminescent display apparatus includes a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, each of the display cells including a select transistor whose gate receives a select voltage from one of the scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor, wherein ~~a~~ the other of the source and the drain of the drive transistor and other terminal of the capacitor are connected to a scan line next to the one of the scan lines. The driving method includes first supplying a first voltage to each of the scan lines during a predetermined cycle; second supplying a second voltage larger than the first voltage to the each of the scan lines during the cycle, successively from the first supplying; and third supplying a voltage not larger than a threshold voltage of

the select transistor to each of the scan lines, at least during the cycle, successively from the second supplying.

Paragraph beginning on page 10, line 22:

A driving method according to still another aspect of the present invention includes driving an electroluminescent display apparatus. The electroluminescent display apparatus includes a plurality of display cells arranged in a matrix form in which a plurality of select scan lines and a plurality of data lines intersect, each of the display cells including a select transistor whose gate receives a select voltage from one of the select scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor; and a plurality of write scan lines, each of the write scan lines being arranged in a pair with each of the select scan lines and being connected to ~~a~~the other of the source and the drain of the drive transistor and other terminal of the capacitor. The driving method includes first supplying the select voltage and a write reference voltage to each of the select scans line and each of the write scan lines, respectively, at a voltage value and a timing such that the data voltage is written in the capacitor, without allowing the electroluminescent element to

emit light; second supplying the select voltage and the write reference voltage to the each of the select scan lines and the each of the write scan lines, respectively, at a voltage value and a timing such that a voltage stored in the capacitor is held, without allowing the electroluminescent device to emit light; and third supplying the select voltage and the write reference voltage to the each of the select scan lines and the each of the write scan lines, respectively, at a voltage value and a timing such that light emission of the electroluminescent device is sustained until the next first supplying, based on the voltage stored.

Paragraph beginning on page 11, line 24:

A driving method according to still another aspect of the present invention includes driving an electroluminescent display apparatus. The electroluminescent display apparatus includes a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, each of the display cells including a select transistor whose gate receives a select voltage from one of the scan lines; a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; a capacitor whose one terminal is connected to the gate of the drive transistor; and an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor; and a plurality of

common lines, each of the common lines being connected to ~~a~~the other of the source and the drain of the drive transistor and the other terminal of the capacitor. The driving method includes calculating a voltage drop in the electroluminescent element at a position in a direction of each of the scan lines, based on the position in the direction with respect to the each of common lines and a wiring resistance between the display cells arranged on the each of common lines; correcting the data voltage based on the voltage drop; and supplying the data voltage corrected to each of the data lines.

Paragraph beginning on page 15, line 25:

Fig. 2 illustrates an equivalent circuit in the display cell of the EL display apparatus according to the first embodiment. Fig. 2 expresses three display cells $PX_{(k, i-1)}$, $PX_{(k, i)}$, $PX_{(k, i+1)}$ located on the $i-1$ -th line to the $i+1$ -th line on the k -th row. Here, the equivalent circuit in the display cell $PX_{(k, i)}$ on the i -th line on the k -th row will be explained. The display cell $PX_{(k, i)}$ includes an n-channel (or p-channel) select TFT 12_i whose gate is connected to the scan line Y_i and drain (or source) is connected to the data line X_k , an n-channel (or p-channel) drive TFT 13_i whose gate is connected to the source (or drain) of the select TFT 12_i and the source (or drain) is connected to the scan line Y_{i+1} in the low-order display cell $PX_{(k, i+1)}$, a capacitor CS_i connected between the source (or drain) and the gate of the drive TFT 13_i , and an OLED LD_i whose anode side is

connected to a supply line of the supply voltage V_{dd} and cathode side is connected to the drain (or source) of the drive TFT 13_i. The display cells $PX_{(k, i-1)}$, $PX_{(k, i+1)}$ and other display cells are expressed by the same equivalent circuit as in the display cell $PX_{(k, i)}$.

Paragraph beginning on page 16, line 15:

The operation of the equivalent circuit, assuming n-channel select and drive transistors 12 and 13, shown in Fig. 2 will be explained. Fig. 3 illustrates a timing chart of a scan line select voltage supplied to the scan lines Y_{i-1} to Y_{i+2} , and a data voltage supplied to the data line X_k . In Fig. 3, voltage of the scan line Y_{i+2} supplied to the display cell $PX_{(k, i+2)}$ is also shown, for the convenience of explanation.

Paragraph beginning on page 34, line 2:

Fig. 7 illustrates an equivalent circuit in the display cell of the EL display apparatus according to the third embodiment. Fig. 7 expresses three display cells $PX_{(k, i-1)}$, $PX_{(k, i)}$, $PX_{(k, i+1)}$ located on the $i-1$ -th line to the $i+1$ -th line on the k -th row. Here, the equivalent circuit in the display cell $PX_{(k, i)}$ on the i -th line on the k -th row will be explained. The display cell $PX_{(k, i)}$ includes an n-channel (or p-channel) select TFT 52_i whose gate is connected to the scan line Y_{ai} and drain (or source) is connected to the data line X_k , an n-channel (or p-channel)

drive TFT 53_i whose gate is connected to the source (or drain) of the select TFT 52_i and the source (or drain) is connected to the scan line Yb_i, a capacitor CS_i connected between the source (or drain) and the gate of the drive TFT 53_i, and an OLED LD_i whose anode side is connected to the groundline GND and cathode side is connected to the drain (or source) of the drive TFT 53_i. The display cells PX_(k, i-1), PX_(k, i+1) and other display cells are expressed by the same equivalent circuit as in the display cell PX_(k, i).

Paragraph beginning on page 34, line 16:

The operation of the equivalent circuit, assuming n-channel select and drive transistors, shown in Fig. 7 will be explained. Fig. 8 illustrates a timing chart of a scan line select voltage supplied to the scan lines Ya_{i-1} to Ya_{i+2}, a write reference voltage supplied to the write scan lines Yb_{i-1} to Yb_{i+2}, and a data voltage supplied to the data line X_k. In Fig. 8, voltage of the select scan line Ya_{i+2} and voltage of the write scan line Yb_{i+2} supplied to the display cell PX_(k, i+2) are also shown, for the convenience of explanation.